AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

Listing of Claims:

Claims 1 - 5 (Cancelled).

6. (Currently amended) [[The]] A measuring system ~~according to claim 4~~ for determining a property of an oil from a dielectric property of the oil, comprising:

a first sensor for measuring an electric capacitance and a second sensor for measuring a temperature, wherein the first sensor is designed as a dielectric sensor which is immersed in the oil and has a stray-field capacitor which functions as the measuring capacitor, and the second sensor is designed as a temperature sensor which is immersed in the oil; and

a compensation device for correcting the measured value of the electric capacitance, taking into account a capacitance reference value measured on an auxiliary capacitor situated in proximity to the measuring capacitor, wherein the corrected measured value of the electric capacitance and the temperature measured by the second sensor are used to determine an ageing state of the oil,

wherein the dielectric sensor includes the auxiliary capacitor and on introduction of the dielectric sensor into the oil, the auxiliary capacitor is not immersed in the oil until the measuring capacitor is fully immersed in the oil, wherein feeder lines of the measuring capacitor and the auxiliary capacitor are identical in design and are arranged in mutual symmetry.

7. (Currently amended) [[The]] A measuring system ~~according to claim 4~~ for determining a property of an oil from a dielectric property of the oil, comprising:

a first sensor for measuring an electric capacitance and a second sensor for measuring a temperature, wherein the first sensor is designed as a dielectric sensor which is immersed in the oil and has a stray-field capacitor which functions as the measuring capacitor, and the second sensor is designed as a temperature sensor which is immersed in the oil; and

a compensation device for correcting the measured value of the electric capacitance, taking into account a capacitance reference value measured on an auxiliary capacitor situated in proximity to the measuring capacitor, wherein the corrected measured value of the electric capacitance and the temperature measured by the second sensor are used to determine an ageing state of the oil,

wherein the dielectric sensor includes the auxiliary capacitor and on introduction of the dielectric sensor into the oil, the auxiliary capacitor is not immersed in the oil until the measuring capacitor is fully immersed in the oil, wherein the auxiliary capacitor is composed of at least one spur line which ends upstream from the measuring capacitor and is designed and arranged like the feeder lines of the measuring capacitor.

8. (Currently amended) The measuring system as recited in Claim [[4]] 6, wherein the measuring capacitor is formed by a plurality of flat printed conductors in the form of interdigital capacitor.

9. (Previously presented) The measuring system as recited in Claim 8, wherein the printed conductors are printed on an insulating substrate by thin-film or thick-film methods.

10. (Currently amended) The measuring system as recited in Claim 6, ~~further comprising:~~ ~~a~~ wherein the temperature sensor is ~~in the form of~~ at least one of: a Negative Temperature Coefficient (NTC) resistor, a Positive Temperature Coefficient (PTC) resistor [[or]] and a temperature element.

11. (Currently amended) The measuring system as recited in Claim [[10]] 6, wherein the temperature sensor is connected to the dielectric sensor to form a structural unit.

12. (Currently amended) The measuring system as recited in Claim 9, wherein feeder lines leading to [[a]] the temperature sensor are applied to the insulating substrate in the form of printed conductors.

13. (Currently amended) The measuring system as recited in Claim 11, wherein feeder lines leading to the temperature sensor are applied to [[the]] an insulating substrate in the form of printed conductors.

14. (Cancelled)

15. (Currently amended) [[The]] A measuring system ~~according to claim 14~~ for determining a property of an oil from a dielectric property of the oil, comprising:

a first sensor for measuring an electric capacitance and a second sensor for measuring a temperature, wherein the first sensor is designed as a dielectric sensor which is immersed in the oil and has a stray-field capacitor which functions as a measuring capacitor, and the second sensor is designed as a temperature sensor which is immersed in the oil, and wherein the first and second sensors are each connected to an analyzer device which assigns a value of the property to be determined to a measured temperature value and a measured electric capacitance value, wherein the property to be determined includes an ageing state of the oil, and wherein the value of the electric capacitance measured by the dielectric sensor is compared in a comparator device of the analyzer device with a stored reference value assigned to the measured temperature value, and a signal is output as a function of whether the reference value is reached or exceeded, wherein the dielectric sensor has an auxiliary capacitor and on introduction of the dielectric sensor into the oil, the auxiliary capacitor is not immersed in the oil until the measuring capacitor is fully immersed in the oil, and wherein feeder lines of the measuring capacitor and the auxiliary capacitor are identical in design and are arranged in mutual symmetry, wherein the auxiliary capacitor is composed of at least one spur line which ends upstream from the measuring capacitor and is designed and arranged like the feeder lines of the measuring capacitor, wherein the measuring capacitor is formed by a plurality of flat printed conductors in particular in the form of interdigital capacitor, and wherein the printed conductors are printed on an insulating substrate by thin-film or thick-film methods.

Claims 16 - 20 (Cancelled).

21. (Currently amended) [[The]] A measuring device ~~of claim 20~~, comprising:

a first sensor that measures a first property of an oil and outputs a first measured value;

a second sensor that measures a second property of said oil and outputs a second measured value;

an analyzer device connected to said first and second sensors, wherein said analyzer device compares said first and second measured values with stored reference values and outputs at least one signal based on differentials between said measured values and said stored reference values, wherein the at least one signal determines an ageing state of the oil; and

a compensation device that takes calibrating measurements of said first and second properties, wherein said compensation device is an auxiliary capacitor disposed in proximity to said first sensor, and wherein said auxiliary capacitor includes at least one spur line ending upstream from feeder lines of a measuring capacitor of said first sensor and that is symmetrical with the feeder lines of said measuring capacitor.

22. (Currently amended) The measuring device of claim [[20]] 21, where said first sensor is structurally attached to said second sensor.

Claims 23-29 (Cancelled).

30. (Currently amended) The ~~measurement assembly~~ measuring device according to claim [[29]] 21, wherein the oil is a deep-frying fat.

31. (Currently amended) The ~~measurement assembly~~ measuring device according to claim [[27]] 21, wherein the ~~first and second sensors are connected with an~~ analysis device ~~which~~ allocates a value of [[the]] a characteristic to be determined to a measured temperature value and to a measured electrical capacitance value.

32. (Currently amended) The ~~measurement assembly~~ measuring device according to claim 31, wherein the analysis device includes a comparison device, wherein the value of the electrical capacitance measured by [[the]] a dielectric sensor is compared with a stored reference value allocated to the measured temperature value and a signal is output as a function of reaching or exceeding the reference value.

33. (Currently amended) The ~~measurement assembly~~ measuring device according to claim [[27]] 21, wherein [[the]] supply lines of the measurement capacitor and supply lines of the auxiliary capacitor are formed symmetrically and identical to each other in construction.

34. (Currently amended) The ~~measurement assembly~~ measuring device according to claim [[27]] 21, wherein the auxiliary capacitor includes two stub cables ending in front of the measurement capacitor which are formed and arranged in a same way as [[the]] supply lines of the measurement capacitor.

35. (Currently amended) The ~~measurement assembly~~ measuring device according to claim [[27]] 21, wherein the measurement capacitor is formed by a plurality of flat conductor tracks.

36. (Currently amended) The ~~measurement assembly~~ measuring device according to claim 35, wherein the plurality of flat conductor tracks are formed as an inter-digital capacitor.

37. (Currently amended) The ~~measurement assembly~~ measuring device according to claim 35, wherein the plurality of flat conductor tracks are printed in thin or thick layer technology onto an insulated carrier.

38. (Currently amended) The ~~measurement assembly~~ measuring device according to claim 37, wherein supply lines of [[the]] a temperature sensor are applied to the insulating carrier in the form of conductor tracks.

39. (Cancelled)

40. (Cancelled)

41. (New) The measuring device according to claim 21, wherein said first sensor includes a dielectric sensor and said first property is a capacitance of the oil, and said second sensor includes a temperature sensor and said second property is a temperature of the oil.

42. (New) The measurement device according to claim 41, wherein the temperature sensor is at least one of: a Negative Temperature Coefficient (NTC) resistor, a Positive Temperature Coefficient (PTC) resistor and a temperature element.

43. (New) The measuring system as recited in Claim 7, wherein the measuring capacitor is formed by a plurality of flat printed conductors in the form of interdigital capacitor.

44. (New) The measuring system as recited in Claim 43, wherein the printed conductors are printed on an insulating substrate by thin-film or thick-film methods.

45. (New) The measuring system as recited in Claim 7, wherein the temperature sensor is at least one of: a Negative Temperature Coefficient (NTC) resistor, a Positive Temperature Coefficient (PTC) resistor and a temperature element.

46. (New) The measuring system as recited in Claim 7, wherein the temperature sensor is connected to the dielectric sensor to form a structural unit.

47. (New) The measuring system as recited in Claim 7, wherein feeder lines leading to the temperature sensor are applied to an insulating substrate in the form of printed conductors.

48. (New) The measuring system according to claim 15, wherein the analysis device includes a comparison device, wherein the value of the electrical capacitance measured by the dielectric sensor is compared with a stored reference value allocated to the measured temperature value and a signal is output as a function of reaching or exceeding the reference value.

49. (New) The measuring system according to claim 15, wherein supply lines of the measurement capacitor and supply lines of the auxiliary capacitor are formed symmetrically and identical to each other in construction.

50. (New) The measuring system according to claim 15, wherein supply lines of the temperature sensor are applied to an insulating carrier in the form of conductor tracks.

51. (New) The measuring system according to claim 15, wherein the temperature sensor is at least one of: a Negative Temperature Coefficient (NTC) resistor, a Positive Temperature Coefficient (PTC) resistor and a temperature element.

52. (New) The measuring system according to claim 15, wherein the temperature sensor is connected with the dielectric sensor to form a structural unit.